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| APPLICATION NO.  | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO.        | CONFIRMATION NO. |
|--|-------------|----------------------|----------------------------|------------------|
| 10/619,999   | 07/14/2003  | Pil-Kwon Jun         | 8836-186 (IC12074-US)      | 7488             |
| 22150  | 7590        | 01/25/2005           | EXAMINER                   |                  |
| F. CHAU & ASSOCIATES, LLC<br>130 WOODBURY ROAD<br>WOODBURY, NY 11797 |             |                      | NOVOSAD, JENNIFER ELEANORE |                  |
|  |             |                      | ART UNIT                   | PAPER NUMBER     |
|  |             |                      | 3634                       |                  |

DATE MAILED: 01/25/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/619,999

Applicant(s)

JUN ET AL.

Examiner

Jennifer E. Novosad

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 14 July 2003 and 10 November 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-35 is/are pending in the application.
- 4a) Of the above claim(s) 1-8 and 14-35 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 9 is/are rejected.
- 7) ☒ Claim(s) 10-13 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 14 July 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☒ Certified copies of the priority documents have been received in Application No. 10/619,999.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

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### **DETAILED ACTION**

*At the outset*, it is noted that the examiner of record in this application has changed.

Please direct all future proceedings, concerning this application, to Examiner Jennifer E.

Novosad, Art Unit 3634.

This non-final Office action is in response to the application filed July 14, 2003 and the election, to the restriction requirement, filed November 10, 2004.

#### ***Election/Restriction***

Applicant's election with traverse of Species V, i.e., Figure 7, in the reply filed on November 10, 2004 is acknowledged. The traversal is on the ground(s) that "comprising multiple species as indicated in the Restriction Requirement and a total of 35 claims, the burden of simultaneously examination is believed to be low". This is not found persuasive because applicant has failed to point out why the restriction requirement is improper and hence why the species are not patentably distinct. *Thus*, as has been shown by the restriction requirement, there is indeed multiple "patentably distinct" species that each require a separate search. *For example*, the species of Figure 9 would require a search that is separate and different from the search needed for the species Figure 7, since the species of Figure 9 have opposite sloping bottom surfaces, not present in the species of Figure 7.

*Thus*, the requirement is still deemed proper and is therefore made FINAL.

***Abstract***

Applicant is reminded of the proper content of an abstract of the disclosure. The abstract should not refer to purported merits or speculative applications of the invention and should not compare the invention with the prior art, as in the last two lines.

Applicant is reminded of the proper language and format for an abstract of the disclosure. The language should be clear and concise and should not repeat information given in the title. It should avoid using phrases which can be implied, such as, "is provided", as in line 2.

***Claim Rejections - 35 USC § 112***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claim 9 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The language of the limitation "to define a plurality of slots" in line 6 of claim 9 renders the claim indefinite since the structural relationship between the elements, i.e., the protrusions and the slots, is unclear. *To correct this*, at the very least, --therebetween-- should be inserted after "slots" in line 6.

The language of the limitation "the plurality of protrusions comprising vertical lower sidewalls that define lower widths of the plurality of slots" in lines 7-9 of claim 9 renders the claim indefinite since the structural relationship between the elements is unclear. *In particular*, it is unclear how a protrusion can define a width of a slot. *Further*, the term "lower" appears to be a

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relative term not defined by the claim, and hence the metes and bounds of the claim cannot be properly ascertained since one would not know what portion of the slot is the "lower" portion defining the "lower" width. *Finally*, it is unclear --each-- protrusion comprises the sidewalls. *Thus*, it is suggested that --each-- be inserted before "comprising" in line 8.

***Allowable Subject Matter***

Claim 9 would be allowable if rewritten or amended to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action and claims 10-13 are objected to as being dependent upon a rejected base claim.

The following is a statement of reasons for the indication of allowable subject matter: The prior art of record fails to show or suggest "vertical" panels (see line 3) attached to "one" (see line 3) surface of a support panel, whereby the "vertical body panel" (see line 4) of the vertical panels has protrusions extending from a "top" surface (see line 5) having slots formed therebetween, whereby the protrusions define first and second sets of "interleaved" protrusions (see line 7) and the protrusions each comprise "vertical lower sidewalls" that are "higher or lower" than each other in the first and second set of protrusions, as specifically called for in the claimed combination of claim 9.

With respect to U.S. Patent Nos. 4,611,966 and 5,706,946, it is noted that each of these references do not show "three" panels, as required in line 3 of claim 9.

With respect to U.S. Patent No. 4,568,234, it is noted that although this reference shows lower vertical sidewalls of two sets of protrusions being higher or lower than one another (see Figure 11), this reference does not show "three vertical panels" as required by claim 9.

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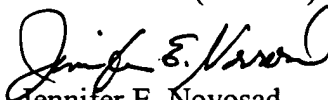
With respect to U.S. Patent Nos. 2,338,290, 4,733,781, 4,969,560, and 5,332,105, it is noted that while each of these references shows "three panels" each having protrusions and slots, the panels are not "vertical" nor are the panels attached on "one surface" of a support panel, as required in claim 9.

### *Conclusion*

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jennifer E. Novosad whose telephone number is (703)-305-2872. The examiner can normally be reached on Monday-Thursday, 5:30am-4:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Carl D. Friedman can be reached on (703)-308-0839. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
Jennifer E. Novosad  
Primary Examiner  
Art Unit 3634

Jennifer E. Novosad/jen  
January 12, 2005